



United States of America

PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda item 1.13.1 - to review and, if appropriate, revise the power limits appearing in Articles S21 and S22 in relation to the sharing conditions among non-GSO FSS, GSO FSS, GSO broadcasting-satellite service (BSS), space sciences and terrestrial services, to ensure the feasibility of these power limits and that these limits do not impose undue constraints on the development of these systems and services

Modifications to Resolution 538 (WRC-97)

Background information

WRC-97 adopted an allocation to non-GSO FSS in the Appendix S30 BSS bands (11.7-12.5 GHz in Region 1, 11.7-12.2 GHz in Region 3 and 12.2-12.7 GHz in Region 2) (see S5.487A). WRC-97 also specified provisions in Resolution 538, including provisional epfd limits, to govern non-GSO FSS in the Appendix S30 BSS bands and associated feeder-link bands (17.3-17.8 GHz in Regions 1 and 3, 17.8-18.1 GHz in all Regions). As a consequence of the extensive studies carried out within ITU-R under agenda item 1.13, it is expected that WRC-2000 will adopt revised epfd limits in Article S22 for non-GSO FSS in these bands. Therefore, it is necessary to revisit the provisions of Resolution 538 to update them accordingly. Annex 5 to Chapter 3 of the CPM-99 Report provides examples of modifications to Resolution 538.

The following proposal modifies Resolution 538 to suppress provisions that CPM-99 proposed to contain elsewhere in the Radio Regulations or that are no longer needed. In addition, necessary provisions of Resolution 538 are maintained, such as requesting BR to review findings made for certain non-GSO FSS systems based on the expected revision of the Article S22 epfd limits.

Proposal**MOD** USA/12/163**RESOLUTION 538 (WRC-972000)****Use of the frequency bands covered by Appendices S30/30 and S30A/30A by non-geostationary-satellite systems in the fixed-satellite service**The World Radiocommunication Conference (~~Geneva, 1997~~Istanbul, 2000),*considering***MOD** USA/12/164

a) that provisional limits adopted by WRC-97 have been ~~established~~revised and included in Article ~~S22 and in the Annex to this Resolution~~ to ensure that the interference caused by non-geostationary-satellite (non-GSO) systems in the fixed-satellite service (FSS) into assignments operated in conformity with the Appendices ~~S30~~ and ~~S30A~~ Plans is maintained within ~~negligible~~agreed levels;

NOC USA/12/165

b) that the integrity of the above-mentioned Plans and their future modifications is to be ensured;

c) that non-GSO systems should not be entered into those Plans and therefore should not apply the procedures associated with the Plans and should not be protected by those procedures;

MOD USA/12/166

d) that ~~this Conference has~~WRC-97 decided to introduce in Article ~~S5~~ a new allocation to the FSS in the frequency bands 11.7-12.5 GHz in Region 1, 12.2-12.7 GHz in Region 2 and 11.7-12.2 GHz in Region 3, limited to non-GSO FSS systems,

Reasons: Editorial and changes for clarity.*resolves*

1

SUP USA/12/167

1.1

MOD USA/12/168

1.21 that ~~such a system shall, as of the end WRC-99,~~a non-GSO FSS system operating in the frequency bands covered by Appendices 30 and 30A shall comply with the limits specified in Article S22, as revised, if appropriate, by WRC-992000, irrespective of the date of receipt of the complete coordination or notification information, as appropriate, relating to the non-GSO FSS system;

Reasons: *Resolves* 1.1 can be suppressed, as it is a provisional measure for operational non-GSO systems between WRC-97 and WRC-2000. Modification to 1.2 is required to maintain the decision of WRC-97 to ensure the protection of the BSS Plans by all non-GSO systems irrespective of filing date with BR. While the proposed provisions of Article S22 will take care of this for systems filed

after WRC-97, *resolves* 1.2 addresses systems filed prior to the end of WRC-97. If it is determined that no systems were filed prior to the end of WRC-97, WRC-2000 may consider that this provision can be suppressed.

SUP USA/12/169

1.3

Reasons: This *resolves* can be suppressed, as it is included in Radio Regulation S22.5G (see Annex 1 to Chapter 3 of the CPM Report and proposal IAP/14/264).

SUP USA/12/170

1.4

Reasons: This *resolves* is now covered by the $epfd_{is}$ limits appearing in Table S22-3 and Radio Regulation S22.5G (see Annex 1 to Chapter 3 of the CPM Report and proposals IAP/14/258 and 264).

MOD USA/12/171

1.52 that, in the case that, between 22 November 1997 and the end of WRC-2000, if an administration operating or bringing into use a GSO system before the end of WRC-2000, because it considered that a non-GSO FSS system proposed by another administration might cause unacceptable interference into its GSO system, then:

- ~~the administration operating the GSO system shall send~~ to the administration operating the non-GSO FSS system the technical details upon which its disagreement is based and, if this is not resolved by the end of WRC-2000, then;
- unless the limits adopted by WRC-2000 are met, the administration operating the non-GSO FSS system shall continue its efforts to resolve the difficulties, taking into account especially degradation of picture and sound quality or signal availability with regard to GSO systems in operation;

Reasons: Although the provisions of *resolves* 1 must have been invoked prior to the end of WRC-2000, the actions contemplated by this *resolves* could extend beyond the end of WRC-2000. Thus, it is necessary to retain this *resolves* in a suitably modified form. If this *resolves* has not been invoked by the end of WRC-2000, WRC-2000 may consider its suppression.

SUP USA/12/172

1.6

MOD USA/12/173

1.73 that, as of 22 November 1997, such a system shall be subject, for the coordination with non-GSO systems, to the application of the provisions of § 2.1 of Section II of Resolution 46 (Rev.WRC-97)/No. S9.12;

Reasons: Although this provision is proposed to be included in a footnote in Article S5, it would then only apply after the end of WRC-2000. Therefore, it is necessary to maintain this provision to apply from 22 November 1997.

MOD USA/12/174

1.84 that, as of 22 November 1997, such a system shall apply, using an equivalent power flux-density threshold of $-185.3 \text{ dB(W/m}^2/4 \text{ kHz)}$ for 99.7% of the time, calculated with the reference 90 cm diameter antenna pattern provided in Annex 5 of Appendix **S30** for Regions 1 and 3, the provisions of No. **S9.8**/Article 7 of Appendix **S30** with respect to assignments which appear in Article 11 of Appendix **S30** with the symbols AE or PE_z.

Reasons: WRC-2000 may decide that this specific agreement from WRC-97 is no longer required and that this provision may be suppressed.

SUP USA/12/175

2

Reasons: By the end of WRC-2000, this provision will have been overtaken by events.

requests ITU-R

SUP USA/12/176

a)

SUP USA/12/177

b)

MOD USA/12/178

e)1 to complete the studies in the frequency bands specified in Tables **S22-1D** and **S22-2** relating to the sharing criteria to be applied for determining the need for coordination between non-GSO FSS systems where No. **S9.10** applies, with a view to promoting efficient use of spectrum/orbit resources and equitable access to these resources by all countries;

MOD USA/12/179

d)2 to report to ~~the 1999 Conference Preparatory Meeting (CPM-99) on the conclusion of these studies~~ WRC-03 the results of the studies under *requests ITU-R 1*,

Reasons: While certain provisions are no longer required, studies relating to the sharing criteria to be applied during the coordination between non-GSO FSS systems are still needed.

instructs the Radiocommunication Bureau

MOD USA/12/180

as of the end of WRC-~~99~~2000, to review and, if appropriate, revise, any finding previously made on the compliance with the limits contained in Article **S22** of a non-GSO FSS system for which complete coordination or notification information, as appropriate, has been received between 22 November 1997 and the end of WRC-~~99~~2000. This review shall be based on the values in Article **S22**, as revised, ~~if appropriate~~, by WRC-~~99~~2000.

Reasons: Modification is to update the provision. These modifications are consistent with those proposed in the CPM Report.

SUP USA/12/181

ANNEX TO RESOLUTION 538 (WRC-97)

Provisional limits

Reasons: Limits as revised by WRC-2000 will be included in Article S22 of the Radio Regulations.
